

ABSTRACT OF THE DISCLOSURE

An apparatus to charge a power supply inductively, with increased efficiency due to resonance, comprises an LC series resonance circuit formed by a capacitor and a primary inductive coil coupled in series with the capacitor, and a secondary inductive coil positioned such that power is inductively transferred from the primary coil to the secondary coil. The LC circuit has a natural resonant frequency, wherein the primary coil of the resonance circuit is coupled to receive power from a source oscillating at the natural resonant frequency. The secondary coil is further coupled to the power supply so that power induced in the secondary coil causes the power supply to be charged.